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database, to the corresponding attribute item of the backup database, and copying information of an attribute item that is determined in the determination step not to correspond to any items of the backup database, to a predetermined item of the backup database in a predetermined format; and

code for a information recovery step of recovering attribute information on the basis of an attribute item name and contents thereof indicated by attribute information, when attribute information stored in the predetermined attribute item in the predetermined format is detected upon copying data from the backup database to one of the plurality of databases.

REMARKS

Claims 1, 3-12 and 14-31 remain in this application. Claims 1, 4-6, 12, 23, 26, 29 and 30 have been amended to define still more clearly what Applicant regards as his invention, in terms which distinguish over the art of record. None of these changes are intended or believed to narrow the scope of any claim recitation. Claims 1, 7, 8, 12, 18, 19 and 23-31 are independent.

Claims 1, 4, 5, 12, 15, 23, 24, 26 and 29 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite, and Claims 1, 3-12 and 14-31 were rejected under 35 U.S.C. § 103(a) as being obvious from U.S. Patent 5,649,196 (Woodhill et al.).

The claims have been carefully reviewed and have been amended to ensure that they comply with the requirements of Section 112. In most respects, Applicant has

simply adopted the examiner's suggestions. Accordingly, withdrawal of the rejection under that Section is respectfully requested.

The various aspects of the present invention to which independent Claims 1, 7, 12, 18, 23, 24, 26, 27, 29 and 30 are directed each provide the ability to copy data from one database to another database, and to make provision for the handling of any attributes of the data being copied that are not defined in the second database. For example, if data were to be copied from a database which has fields for attributes named "address" and "telephone number", into a database which has a field named "telephone number" but none named "address", these aspects of the invention would make it possible to copy the data into the second database anyway. For brevity, this ability was termed, in Applicant's last Amendment, "mismatching attribute item", although that phrase did not (and does not) appear in the claims. Applicant submits the following remarks in an effort to clarify this point, which is believed to be an important distinction between each of these claims and *Woodhill*.

Independent Claim 1 is directed to an information processing apparatus which can access a plurality of databases, and which comprises first and second copying means, and a determining means. The first copying means are for copying data selected from a first database to a second database, and the determining means determine if each of the attribute items of attribute information appended to the data being copied corresponds to attribute items of the second database. The second copying means copy information of an attribute item, that is determined by the determination means to correspond to one of the attribute items of the second database, to a corresponding attribute item of the second database (in the example given above, the "telephone number" item will be copied into the

corresponding field in the second database). Claim 1 also recites that the second copying means copy information of an attribute item that is determined by the determination means not to correspond any of the attribute items of the second database, to a predetermined attribute item of the second database (for example, the “address” item is copied into the second database, but as the latter has no field named “address” this item is copied into a predetermined item, which thus serves as a sort of catch-all for attribute items in the first database that have no counterparts in the second database).

By virtue of these features, even if some of the attribute items of the first database do not correspond to any of the attribute items of the second database, all attribute information can be maintained upon the copying of data of the first database to the second database. Furthermore, when that copied data in the second database is returned to the first database, all the attribute information associated with that data before it was originally copied (that is, when it was still in the first database and had not yet been copied), can be completely recovered.

Woodhill relates to a system for distributed storage management which has means for selectively copying binary objects stored on one of plural storage devices to another of the storage devices. That is, *Woodhill* provides for copying a file from one machine to another machine. Even if the *Woodhill* system treats a file as including normal data and attribute data, however, nothing has been found, or pointed out, in *Woodhill* that would teach or suggest anything corresponding to the recited second copying means.

Applicant notes the assertion in the Office Action that *Woodhill* discloses something corresponding to the recited second copying means at col. 2, lines 20-38, and from col. 9, line 49, through col. 10, line 13. Applicant cannot agree with this assertion.

Col. 2, lines 20-38, merely describes that a current value is calculated for a binary-object identifier, based on the actual contents of the corresponding binary object, and then storing that calculated value; subsequently, the current value of the identifier is identified with stored previous values of the same identifier, and the process of copying the binary objects themselves is controlled based on the result of this comparison. Applicant is utterly unable to see anything in this passage which teaches or suggests means that, when data is being copied from a first to a second database, copy an attribute item of that data into a corresponding attribute item of the second database, as recited in Claim 1. Much less is there seen in this passage any teaching or suggestion that such copying means also copy an attribute item that does not have a corresponding item in the second database, into a predetermined item instead, as recited in Claim 1.

The passage in cols. 9 and 10 is more detailed, but is directed to the same process as is discussed in the passage in col. 2, and likewise fails to teach or suggest anything like the recited second copying means.

Accordingly, Claim 1 is believed to be clearly allowable over *Woodhill*.

Independent Claims 7, 12, 18, 23, 24, 26, 27, 29 and 30 also recite features similar to those discussed above with regard to Claim 1 (or are corresponding method or memory-medium claims), and are believed to be allowable for the same reasons as is Claim 1.

Independent Claim 8 is directed to an aspect of the invention in which conversion information that indicates a correspondence between attribute items of a first and second databases is held, and each of attribute items appended to data copied from the

first database, are copied to the second database in accordance with the conversion information.

By virtue of the above feature, when copying data between databases that contain different kinds of attribute information, attribute information of data in a source database can be surely held in a destination database.

More specifically, Claim 8 is directed to an information processing apparatus which can access a plurality of databases, and which comprises first copying means for copying data selected from a first database to a second database, and means for holding conversion information indicating a correspondence between attribute items of the first and second databases. The apparatus of Claim 8 also has means for converting each of attribute items of attribute information appended to data copied by the first copying means to an attribute item of the second database in accordance with the conversion information. Also provided in the apparatus are second copying means for copying the attribute information converted by the conversion means as attribute information in the second database.

Applicant submits that nothing found, or pointed out, in *Woodhill* would teach or suggest any arrangement capable of copying information from one database to a second, where attribute items of that data that do not correspond to any attribute items in the second database are converted into attribute items of the second database (i.e., into items that can be accommodated in the second database), as recited in Claim 8.

Independent Claims 25 and 28 are similar to Claim 8 in respect of this feature, and are deemed also to be allowable over *Woodhill* for the same reasons as is Claim 8.

A review of the other art of record has failed to reveal anything which, in Applicant's opinion, would remedy the deficiencies of the art discussed above, as a reference against the independent claims herein. Those claims are therefore believed patentable over the art of record.

The other claims in this application are each dependent from one or another of the independent claims discussed above and are therefore believed patentable for the same reasons. For example, Claim 9, which depends from Claim 8, further recites means that copy an attribute item and attribute information thereof to a predetermined attribute item in the second database when conversion information of the attribute does not exist. This feature has been discussed above with regard to Claim 1, and is an additional ground on which Claim 9 is allowable in its own right.

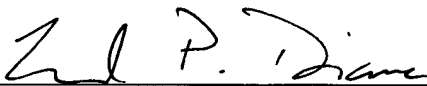
In any event, since each dependent claim is also deemed to define an additional aspect of the invention, the individual reconsideration of the patentability of each on its own merits is respectfully requested.

This Amendment After Final Action is believed clearly to place this application in condition for allowance and its entry is therefore believed proper under 37 C.F.R. § 1.116. At the least, it is believed that the formal rejections have been overcome. In any event, however, entry of this Amendment After Final Action, as an earnest effort to advance prosecution and reduce the number of issues, is respectfully requested. Should the Examiner believe that issues remain outstanding, she is respectfully requested to contact Applicant's undersigned attorney in an effort to resolve such issues and advance the case to issue.

In view of the foregoing amendments and remarks, Applicant respectfully requests favorable reconsideration and early passage to issue of the present application.

Applicant's undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,


Attorney for Applicant

Registration No. 29, 296

FITZPATRICK, CELLA, HARPER & SCINTO
30 Rockefeller Plaza
New York, New York 10112-3801
Facsimile: (212) 218-2200

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VERSION WITH CLAIMS MARKED TO SHOW CHANGES

1. (Twice Amended) An information processing apparatus which can access a plurality of databases, comprising:

first copying means for copying data selected from a first database to a second database;

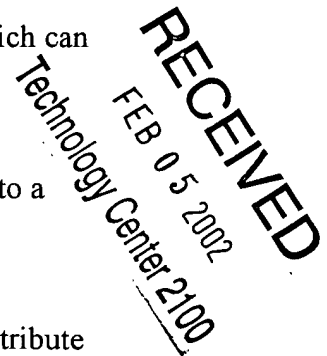
determination means for determining if each of attribute items of attribute information appended to the data corresponds to each of attribute items of the second database; and

second copying means for copying information of an attribute item, which is determined by said determination means to correspond to one of the attribute items of the second database, to a corresponding attribute item of the second database, and [copies] for copying information of [the] an attribute item[, which] that is determined by said determination means not to correspond to any of the attribute items of the second database, to the predetermined attribute item of the second database.

2. (Previously cancelled).

4. (Amended) The apparatus according to claim 3, wherein the predetermined format indicates an attribute item name and contents [thereof].

5. (Amended) The apparatus according to claim 4, further comprising information recovery means for, when said second copying means detects attribute



information stored in the predetermined attribute item in the predetermined format, recovering the attribute information on the basis of the attribute item name and contents [thereof] indicated by the information.

12. (Twice Amended) An information processing method which can access a plurality of databases, comprising:

a first copying step, of copying data selected from a first database to a second database;

a determination step, of determining if each of attribute items of attribute information appended to the data corresponds to each of attribute items of the second database; and

a second copying step, of copying information of an attribute item, which is determined in said determination step to correspond to one of the attribute items of the second database, to a corresponding attribute item of the second database, and [copies] copying information of [the] an attribute item[, which] that is determined in said determination step not to correspond to any of the attribute items of the second database, to the predetermined attribute item of the second database.

13. (Previously cancelled).

23. (Twice Amended) A database system which can copy data between a plurality of databases, comprising:

first copying means for copying data selected from a first database to a second database;

determination means for determining if each of attribute items of attribute information appended to the data corresponds to each of attribute items of the second database; and

second copying means for copying information of an attribute item, which is determined by said determination means to correspond to one of the attribute items of the second database, to a corresponding attribute item of the second database, and [copies] copying information of [the] an attribute item[, which] that is determined by said determination means not to correspond to any of the attribute items of the second database, to the predetermined attribute item of the second database.

26. (Twice Amended) A method of controlling a database system which can copy data between a plurality of databases, comprising:

a first copying step, of copying data selected from a first database to a second database;

a determination step, of determining if each of attribute items of attribute information appended to the data corresponds to each of attribute items of the second database; and

a second copying step, of copying information of an attribute item, which is determined in said determination step to correspond to one of the attribute items of the second database, to a corresponding attribute item of the second database, and [copies]

copying information of [the] an attribute item[, which] that is determined in said determination step not to correspond to any of the attribute items of the second database, to the predetermined attribute item of the second database.

29. (Twice Amended) A storage medium which stores a control program for a database client which copies data between a plurality of databases, said control program comprising:

code for a first copying step of copying data selected from a first database to a second database;

code for a determination step of determining if each of attribute items of attribute information appended to the data corresponds to each of the attribute items of the second database; and

code for a second copying step of copying information of an attribute item, which is determined in the determination step to correspond to one of the attribute items of the second database, to a corresponding attribute item of the second database, and [copies] copying information of [the] an attribute item[, which] that is determined in the determination step not to correspond to any of the attribute items of the second database, to the predetermined attribute item of the second database.

30. (Twice Amended) A storage medium which stores a database client control program for a database system having a plurality of databases and a backup

database for backing up data present in the plurality of databases, said control program comprising:

code for a first copying step of copying data present in one of the plurality of databases to the backup database;

code for a determination step of determining if each of attribute items of attribute information appended to the data corresponds to each of the attribute items of the backup database;

code for a second copying step of copying information of an attribute item, which is determined in the determination step to correspond to one of items of the backup database, to the corresponding attribute item of the backup database, and copying information of an attribute item[, which] that is determined in the determination step not to correspond to any [of] items of the backup database, to a predetermined item of the backup database in a predetermined format; and

code for a information recovery step of recovering attribute information on the basis of an attribute item name and contents thereof indicated by attribute information, when attribute information stored in the predetermined attribute item in the predetermined format is detected upon copying data from the backup database to one of the plurality of databases.